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ODS Management

The use of a group of chemicals, collectively known as ozone depleting substances (ODS), has been identified as causing degradation of stratospheric ozone. Within the USAF, ODS have been used as refrigerants (freons), fire-fighting agents (halons), foam blowing, and cleaning agents.

Discovery of the damaging effects of ODS prompted Federal and international environmental mandates to eliminate the manufacture of ODS. The ozone depleting potential of chemicals was evaluated and the chemicals were categorized according to their potential to deplete the ozone. The most ozone depleting compounds were described as Class I ODS, while the lesser ozone depleting compounds were described as Class II ODS.

Production of the Class I ODS ceased by 31 December 1995. Production of Class II ODS are being phased out, for the most part, by 2020. Production of HCFC-141b, widely used as a replacement for Class I ODS, was phased out at the end of 2002.

The prime resource for information on all aspects of USAF ODS Management is AFI 32-7086, *Hazardous Materials Management*, Chapter 4, "Ozone Depleting Substance Management Program." The chapter implements the relevant regulatory drivers, describes the USAF Class I and Class II ODS Management approach for both facilities and weapon systems, contains instructions on obtaining the Senior Acquisition Official (SAO) approvals required by law for all USAF contracts involving a Class I ODS, gives an overview of the steps required to requisition Class I ODS from the USAF account at the DoD ODS Defense Reserve, and provides pointers to additional information sources and handbooks.

Regulatory Drivers

The Montreal Protocol of 1987 resulted in over 160 countries implementing mandates to halt production of ODS. The United States incorporated the Montreal Protocol into Title VI of the Clean Air Act (CAA) as amended in 1990, which emphasizes the manufacturing and use of less harmful chemicals. The requirements of Title VI are set forth in Title 40 Code of Federal Regulations, Part 82, Subpart F, "Protection of Stratospheric Ozone." Subpart F outlines practices for handling, recycling, and disposal of ODS and repair of ODS-containing appliances. In addition, Executive Order (EO) 13148, "Greening the Government Through Leadership in Environmental Management," 21 April 2000, commits Federal agencies to eliminating the procurement of Class I ODS by 31 December 2010. To accomplish this goal, the EO encourages Federal agencies to "target cost-effective reduction of environmental risk by phasing out Class I ozone depleting substance applications as the equipment using those substances reach the end of their expected service life."

ODS Acquisition

Air Force Federal Acquisition Regulation Supplement (AFFARS) Subpart 5328, "Ozone-Depleting Substances," outlines guidance for the procurement of items that contain or use ODS. The AFFARS specifies the need for senior acquisition official (SAO) approval before a contract that requires the use of a Class I ODS in any manufacture, test, operation, or maintenance can be executed or before a contract can establish any requirement that can only be met by the use of a Class I ODS.

Defense Reserve

In order to ensure that ODS are available for mission-critical use while seeking alternatives, the Department of Defense (DoD) established the ODS Defense Reserve, which is managed by the Defense Logistics Agency (DLA) through the Defense Supply Center, Richmond (DSCR). The reserve manages a stockpile of Class I ODS refrigerants, halons, and solvents, and will remain in operation until all

weapons systems using ODS are replaced or retired. The issuance of ODS to USAF users requires approval by USAF SAO. Units provide requests to MAJCOM hazardous materials management process (HMMP) teams. Requests acceptable to the MAJCOM HMMP teams are provided to the USAF HMMP Team for review and approval. (See AFI 32-7086, Hazardous Materials Management, for details). The SAO approval process must be obtained before any contracts requiring the use of an ODS are approved or any Class I ODS can be allocated from the Defense Reserve to MAJCOMs and single managers.

The only authorized disposition for Class I ODS halons and freons by USAF units is return to the Defense ODS Reserve. Instructions for return of these items are contained on the web address listed below.

Alternatives

Hydrofluorocarbons (HFCs) are gaining acceptance as product substitutes for ODS. Although HFCs contain no ozone harming chlorine, they have high global warming potential. Other fluorinated solvents, hydrocarbon based substances and some aqueous based products are also being successfully used in place of ODS. In order to increase their availability and disseminate information on non-ODS alternatives, the EPA initiated the Significant New Alternatives Policy (SNAP) program. The EPA publishes updates to the SNAP list as new substitutes are developed and approved.

Additional Information

Visit the following websites or contact PROACT at DSN 240-4240 or by e-mail at pro-act@brooks.af.mil.

- EPA, Ozone Depletion, http://www.epa.gov/ozone
- SNAP, http://www.epa.gov/ozone/snap/general/index.html
- DLA for turn-in of excess or unserviceable Class I ODS, https://www.denix.osd.mil/denix/Public/News/DLA/ODS/tpreface.html

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